

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

July 22, 1998

Lees lane

4WD-NSMB

Carl A. Neumayer
Director of Operations and Maintenance
Louisville and Jefferson County
Metropolitan Sewer District
400 South Sixth Street
Louisville, Kentucky 40202-2397

SUBJECT: Final Five-Year Review Report

Lees Lane Landfill Site Louisville, Kentucky

Dear Mr. Neumayer:

Enclosed please find a copy of the final *Five-Year Review Report for the Lees Lane Landfill Site*. This report was approved by the U.S. Environmental Protection Agency (EPA) on July 1, 1998. The findings of the report reveal that the Site remains protective to human health and the environment but the gas collection system is in need of repairs.

The Operation and Maintenance (O&M) activities being conducted by the Jefferson and Louisville County Metropolitan Sewer District (MSD) have been effective in decreasing the concentration of site-related contaminants, and preventing exposure of landfill wastes; however, the gas collection system requires repairs and continuous maintenance in order to prevent off-site migration of subsurface gases. Following is a summary of the findings and recommendations of the five-year review.

FINDINGS

- Depressions along the access road.
- Excessive grass height (up to four feet tall) in some areas of the landfill cap.
- No depressions, tension cracks, erosion or active seeps were noted in the landfill cap.
- Rip-rap is heavily covered with grass and other plants, and it is barely visible at the northern end of the channel (nearest the river).
- Growing vegetation along the water line of the rip rap bank.

- All monitoring wells are in fairly good condition except for ground water monitoring well MW-05 which is partially buried, and gas well G-5 which has growth of vegetation inside the fence and on top of it. Heavy growth of vegetation around gas recovery wells. Many of the concrete collars of these wells were turned, tilted or broken.
- Partially buried Underground Storage Tank (UST) with some type of liquid in it, and emanating a strong, petroleum-type odor. The western end of the tank was settled in about two feet of water. There was a zone of dead plant life ranging from 8 to 35 feet wide that appears to originate on the eastern end of the tank and stretching for approximately 150 feet north of the tank. This zone ended into a drainage swale oriented in a southerly direction.
- During the sampling, the personnel holding the bailer for VOC samples did not wear gloves.
- Personnel performing decontamination procedures did not wear gloves.
- Gasoline canisters were found to be stored in the truck beside or immediately adjacent to decontamination equipment, bailers, rope, and other sampling equipment.
- Samples from monitoring wells MW-A, MW-B, and MW-02 revealed a few exceedances of iron and manganese with random occurrences of chromium and lead. Contaminants detected in monitoring wells MW-04 and MW-05 did not exceed their respective limits.

RECOMMENDATIONS

Restrict vehicular traffic and maintain barricades.

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- Monitoring the areas of subsidence along the access road; however, the larger areas of subsidence should be backfilled with appropriate low hydraulic conductivity material to minimize surface water infiltration, and to direct runoff away from the capped area to prevent ponding of water.
- The landfill cap should be moved regularly, and inspected for areas of erosion or settling.
- Conduct quarterly inspection of the rip rap-lined bank to continue monitoring erosional effects of the river. Trees and weeds should be kept at a minimum.
- Conduct quarterly inspection of ground water and gas monitoring wells to ensure each well is locked and that vandalism has not occurred.
- Conduct necessary repairs of the gas collection system as specified in the O&M Plan and Section 4.6 of the enclosed Five-Year Review Report, including balancing of the system.

- The on-site Underground Storage Tank (UST) and its contest should be investigated. Section 4.7 of the enclosed report specifies the sampling required for this investigation.
- Conduct annual monitoring of all ground water monitoring wells.
- Conduct air and gas monitoring twice a year.

More details on these and other findings and recommendations can be found in Sections 2.0 through 4.0 of the enclosed report. These recommendations are activities that MSD should conduct as part of the Site's O&M in accordance with the Administrative Order of Consent, U.S. EPA Docket No. 91-32-C. The Commonwealth of Kentucky will continue with the oversight of all O&M activities. Please provide me, no later than August 31, 1998, with a schedule of activities for the remainder of the current fiscal year, and for next year where these recommendations are to be implemented along with the planned corrective action, as applicable.

If you have any problems or concerns regarding the contents of this letter, and/or the findings, recommendations, or any portions of the Five-Year Review Report, please contact me at (404)562-8805, and I will gladly discuss them with you.

Sincerely,

Liza I. Montalvo

Remedial Project Manager

Enclosure

cc:

Harold Taylor, EPA Bob Caplan, EPA Robert Pugh, KNREPC